

ABSTRACT

A system and method for processing mosaiced images utilizes a compression-aware demosaicing process that takes into consideration a subsequent compression process. The compression-aware demosaicing process is performed using a compression-considered demosaicing operator that incorporates a color space conversion operator and a frequency-based transformation operator, which are typically associated with the compression process. Consequently, the overall efficiency of the system and method is significantly increased.

Furthermore, the compression-aware demosaicing process produces artifacts that complement the artifacts produced by the subsequent compression process such that the artifacts are less visible in the final color images, which increases the quality of the final color images.